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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/209,183	07/30/2002	Zhaoda Zhang	13498-010002 / MET-14B	4670

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EXAMINER

JONES, DAMERON LEVEST

ART UNIT PAPER NUMBER

1616

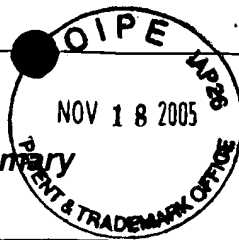
DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Docketed By	Practice Systems
Action Code:	Restrict Reg.
Base Date:	1-22-04
Due Date:	2-22-04
Deadline:	7-22-04
Initials:	DM
Record:	

Docketed By	Billing Secretary
Due Date:	2/22/04
Deadline:	7/22/04
Initials:	SPS 2/4/04

JAN 26 2004



## Office Action Summary

Application No.

10/209,183

Applicant(s)

ZHANG ET AL.

Examiner

D. L. Jones

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-77 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

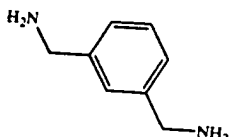
- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

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# RESTRICTION INTO GROUPS

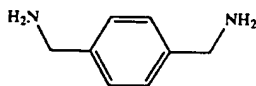
1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- (1). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



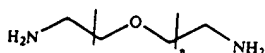
as set forth in claim 2, classified in class 424, subclass 9.3.

- (2). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



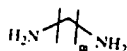
as set forth in claim 2, classified in class 424, subclass 9.3.

- (3). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



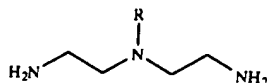
as set forth in claim 2, classified in class 424, subclass 9.3.

- (4). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



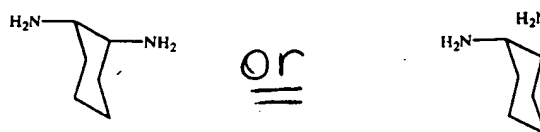
as set forth in claim 2, classified in class 424, subclass 9.3.

- (5). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



as set forth in claim 2, classified in class 424, subclass 9.3.

- (6). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



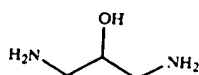
as set forth in claim 2, classified in class 424, subclass 9.3.

- (7). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



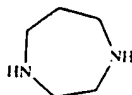
as set forth in claim 2, classified in class 424, subclass 9.3.

- (8). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



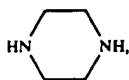
as set forth in claim 2, classified in class 424, subclass 9.3.

- (9). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



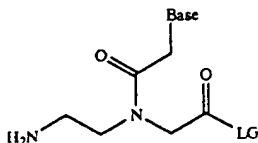
as set forth in claim 2, classified in class 424, subclass 9.3.

- (10). Claims 1-23, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



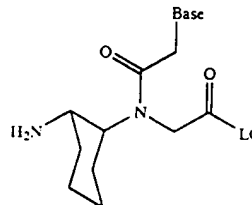
as set forth in claim 2, classified in class 424, subclass 9.3.

- (11). Claims 1, 3-24, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



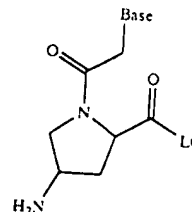
as set forth in claim 24, classified in class 424, subclass 9.3.

- (12). Claims 1, 3-24, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



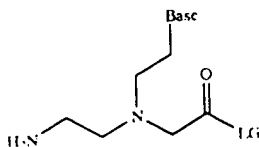
as set forth in claim <sup>24</sup>~~22~~, classified in class 424, subclass 9.3.

- (13). Claims 1, 3-24, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



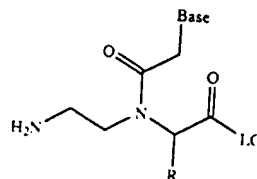
as set forth in claim 24, classified in class 424, subclass 9.3.

- (14). Claims 1, 3-24, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



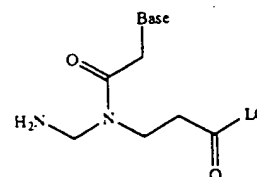
as set forth in claim 24, classified in class 424, subclass 9.3.

- (15). Claims 1, 3-24, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



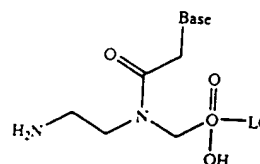
as set forth in claim 24, classified in class 424, subclass 9.3.

- (16). Claims 1, 3-24, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



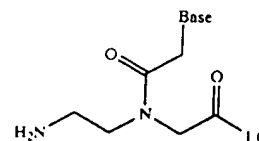
as set forth in claim 24, classified in class 424, subclass 9.3.

- (17). Claims 1, 3-24, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



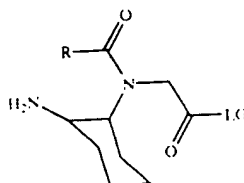
as set forth in claim 24, classified in class 424, subclass 9.3.

- (18). Claims 1, 3-24, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



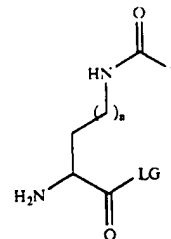
as set forth in claim 24, classified in class 424, subclass 9.3.

- (19). Claims 1, 3-23, 25, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



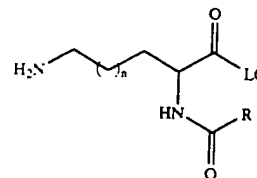
as set forth in claim 25, classified in class 424, subclass 9.3.

- (20). Claims 1, 3-23, 25, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



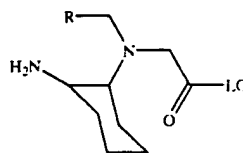
as set forth in claim 25, classified in class 424, subclass 9.3.

- (21). Claims 1, 3-23, 25, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



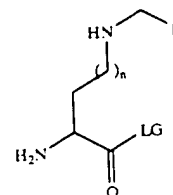
as set forth in claim 25, classified in class 424, subclass 9.3.

- (22). Claims 1, 3-23, 25, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



as set forth in claim 25, classified in class 424, subclass 9.3.

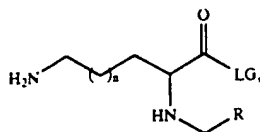
- (23). Claims 1, 3-23, 25, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



as set forth in claim 25, classified in class 424, subclass 9.3.

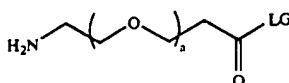
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- (24). Claims 1, 3-23, 25, 27-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



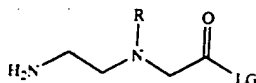
as set forth in claim 25, classified in class 424, subclass 9.3.

- (25). Claims 1, 3-23, 26-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



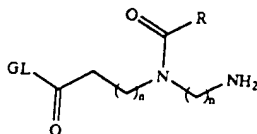
as set forth in claim 26, classified in class 424, subclass 9.3.

- (26). Claims 1, 3-23, 26-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



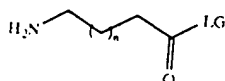
as set forth in claim 26, classified in class 424, subclass 9.3.

- (27). Claims 1, 3-23, 26-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



as set forth in claim 26, classified in class 424, subclass 9.3.

- (28). Claims 1, 3-23, 26-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety

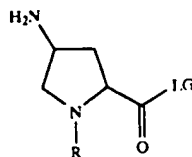




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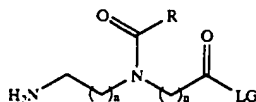
as set forth in claim 26, classified in class 424, subclass 9.3.

- (29). Claims 1, 3-23, 26-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



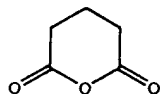
as set forth in claim 26, classified in class 424, subclass 9.3.

- (30). Claims 1, 3-23, 26-33, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



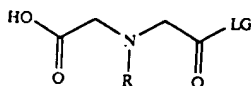
as set forth in claim 26, classified in class 424, subclass 9.3.

- (31). Claims 34-45, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



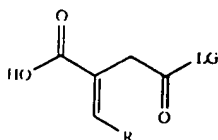
as set forth in claim 35, classified in class 424, subclass 9.3.

- (32). Claims 34-45, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



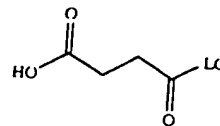
as set forth in claim 35, classified in class 424, subclass 9.3.

- (33). Claims 34-45, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



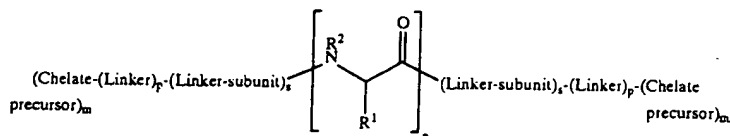
as set forth in claim 35, classified in class 424, subclass 9.3.

- (34). Claims 34-45, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety



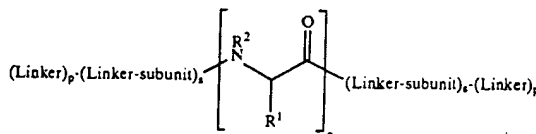
as set forth in claim 35, classified in class 424, subclass 9.3.

- (35). Claims 46-55, drawn to a contrast agent comprising a metal chelate complexed at a  $-\text{CO}_2\text{R}$  and  $\text{NHR}$  termini of a biopolymer, wherein R is independently selected from the group consisting of hydrogen, alkyl, aliphatic, or a leaving group as set forth in independent claim 46, classified in class 424, subclass 9.3.
- (36). Claim 66 is, drawn to a modified peptide



as set forth in claim 66, classified in class 424, subclass 9.3.

- (37). Claim 67 is, drawn to a modified peptide



as set forth in claim 67, classified in class 424, subclass 9.3.

- (38). Claims 34, 36-45, 56-65, and 68-77, drawn to a method of making an MRI agent using a peptide and the linker-subunit moiety not encompassed in Groups (1) – (33) above, classified in class 424, subclass 9.3.

**Note:** Claims appearing in more than one group will only be examined to the extent that they read on the elected invention.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions (1)-(38) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the different inventions (Groups (1) – (34) and (38) are directed to methods of making an MRI agent wherein the linker-subunits for making the agents are structurally different. Thus, prior art anticipating or rendering one linker-subunit-peptide combination group would neither anticipate nor render obvious another group. Hence, there is no common core present in the linker-subunit core. As a result, the inventions are distinct. Likewise, the modified peptide groups, Groups (35) - (37), are unrelated because one is directed to a peptide structure having a chelate thereto and the other modified lacks the present chelate attachment. Thus, they are structurally different and distinct inventions. Furthermore, it should be noted that for each group above, a separate search of the prior art is required in order to determine if the inventions are distinguished over the prior art.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

#### **ELECTION OF SPECIES**

4. Claims 1-77 are generic to a plurality of disclosed patentably distinct species comprising peptide based targeting agents. In particular, the targeting agents may comprise a multitude of linker-subunits as set forth in claims 2, 24-26, and 35 or a modified peptide structure as set forth in claims 46, 66, and 67. Applicant is required under 35 U.S.C. 121 to ***elect a single disclosed species*** for search purposes, even though this requirement is traversed.

**Note:** *The Examiner respectfully requests that Applicant elect a species from within the elected group. Applicant should identify the components of the peptide-linker-subunit combination and all the variables associated with the component. For example, if Group XXXVII is elected, Applicant should identify the linker-subunit, linker moiety (define linker variables, if necessary, i.e.,  $R' = H$ ), precursor chelate moiety (identify variables), and covalent conjugate (identify variables thereof). In addition, Applicant is respectfully requested to state which claims are drawn to the elected species.*

5. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. Due to the complexity of the restriction requirement, a telephone call was not made to request an oral election to the above restriction requirement.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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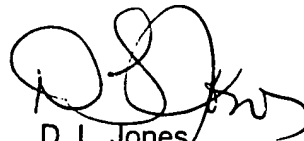
application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. L. Jones whose telephone number is (703) 308-4640. The examiner can normally be reached on Mon.-Fri., 6:45 a.m. - 3:15 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (703) 308 - 2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

**Note:** After February 2, 2004, the Examiner may be reached at (571) 272-0617 and the Examiner's supervisor at (571) 272-0602.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

  
D. L. Jones  
Primary Examiner  
Art Unit 1616

January 16, 2004